10040176.102501

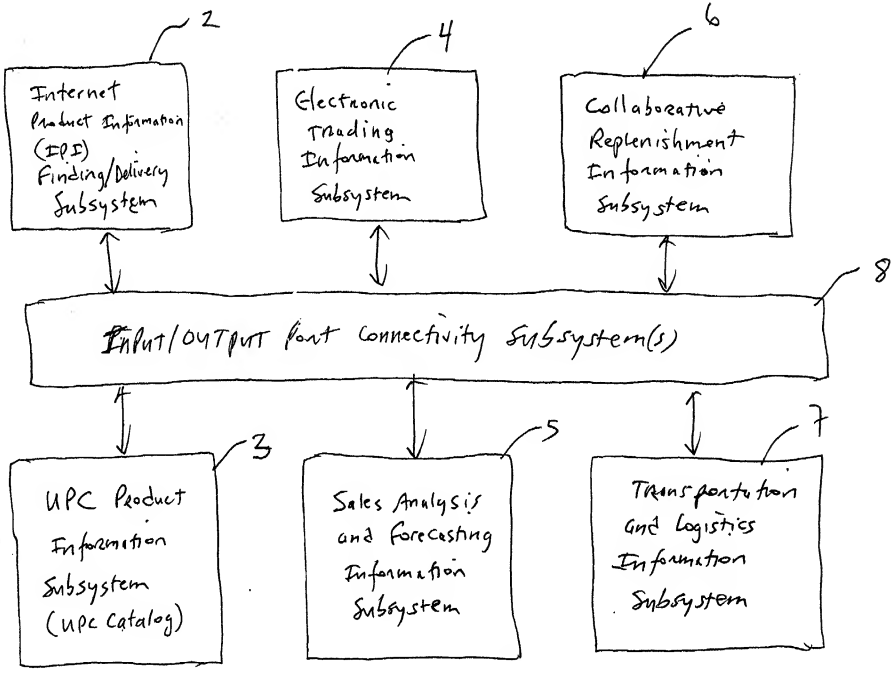
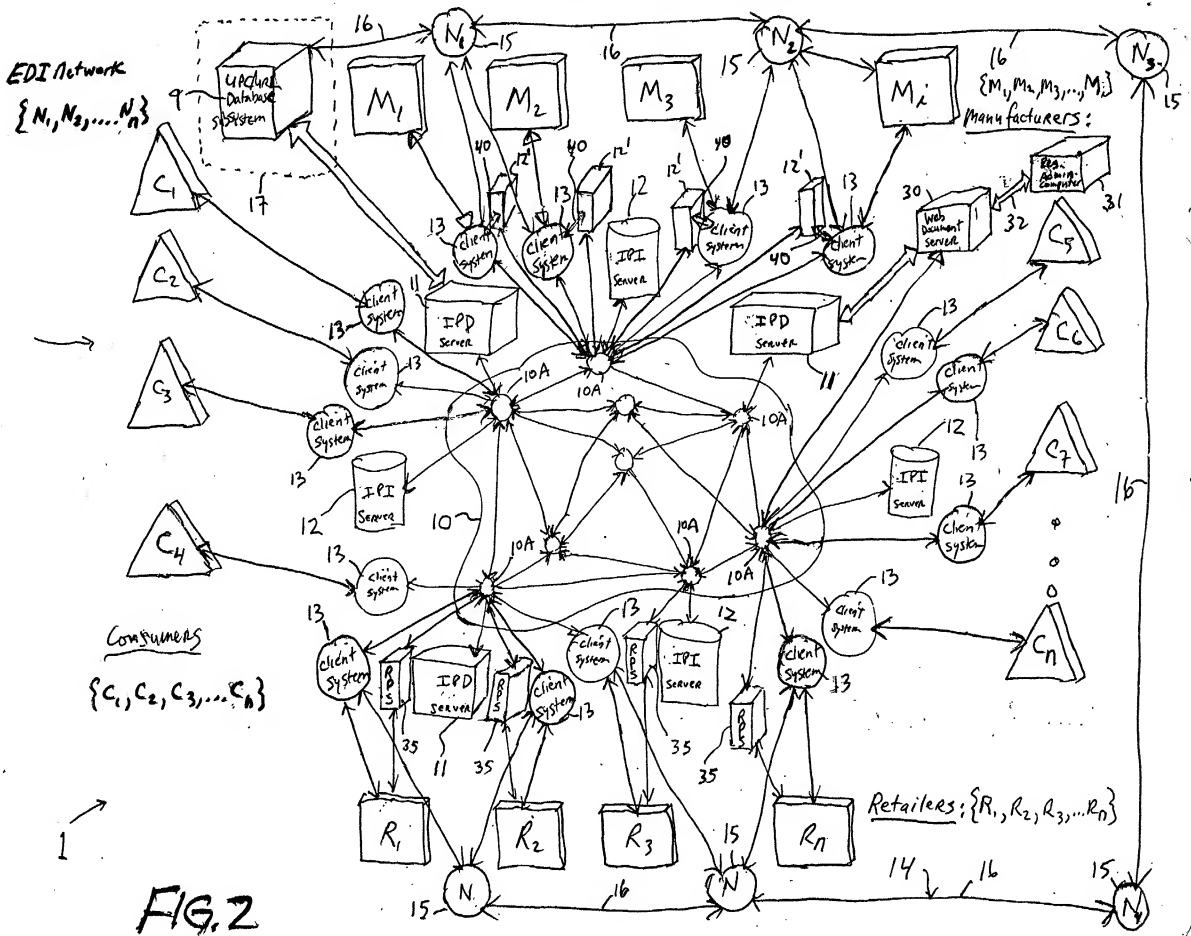


FIG. 1

100-010


EDI Network
{N1, N2, ... Nn}
Uploaded Database System
9
17
16
15
M1
M2
M3
Mi
{M1, M2, M3, ... Mi}
Manufacturers:
N1
N2
N3
N4
N
C1
C2
C3
C4
C5
C6
C7
Cn
Consumers
{C1, C2, C3, ... Cn}
IPD Server
IPI Server
Client System
Web Document Server
Reg. Admin. Computer
RDS
10
10A
11
12
12'
13
30
31
32
35
40
R1
R2
R3
Rn
Retailers: {R1, R2, R3, ... Rn}
14
1
FIG. 2

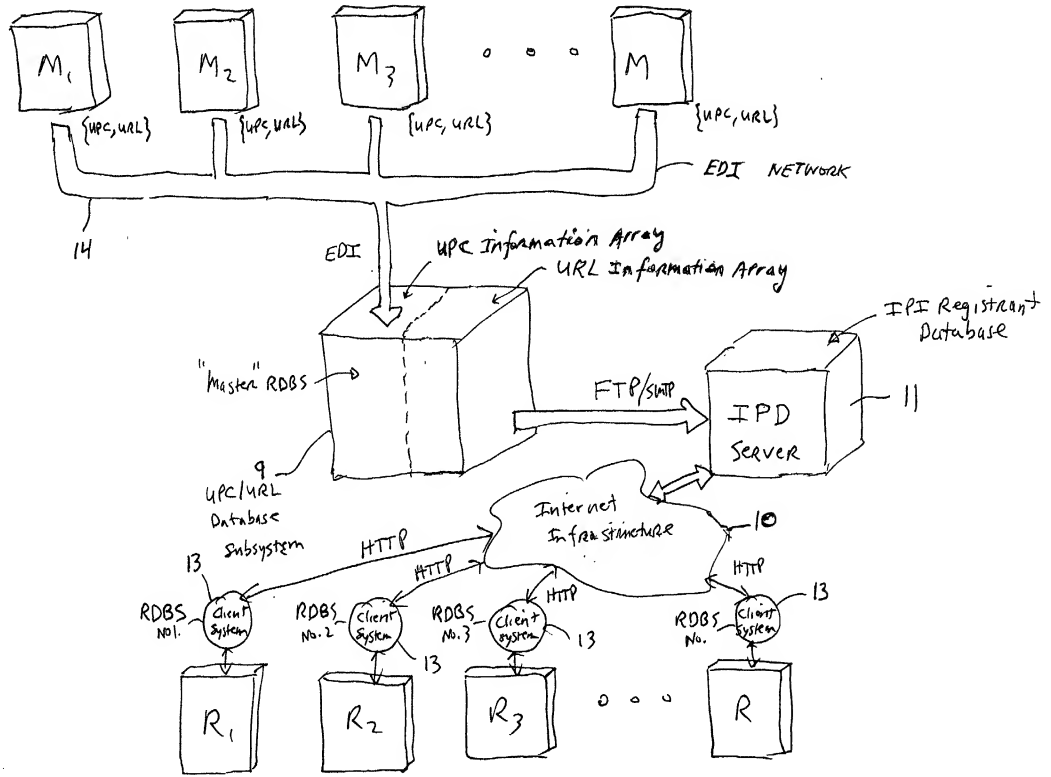

M1
M2
M3
M
{UPC, URL}
{UPC, URL}
{UPC, URL}
{UPC, URL}
EDI NETWORK
14
EDI
UPC Information Array
URL Information Array
"Master" RDBS
9
UPC/URL Database Subsystem
FTP/SMTP
IPD Server
11
IPI Registrant Database
Internet Infrastructure
10
HTTP
HTTP
HTTP
HTTP
13
13
13
13
RDBS No.1
RDBS No.2
RDBS No.3
RDBS No.
Client System
Client System
Client System
Client System
R1
R2
R3
R

FIG. 2A

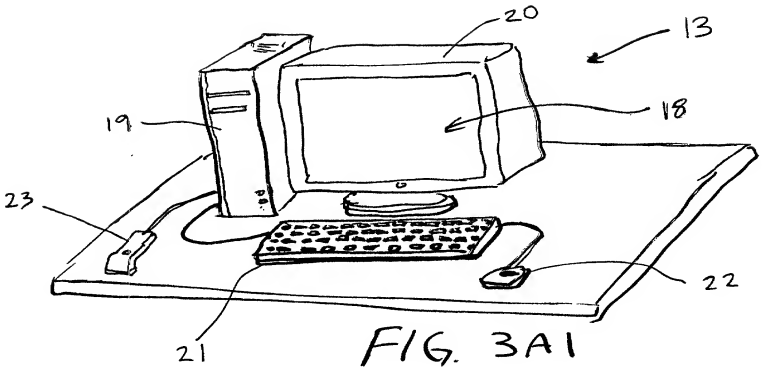


FIG. 3A1

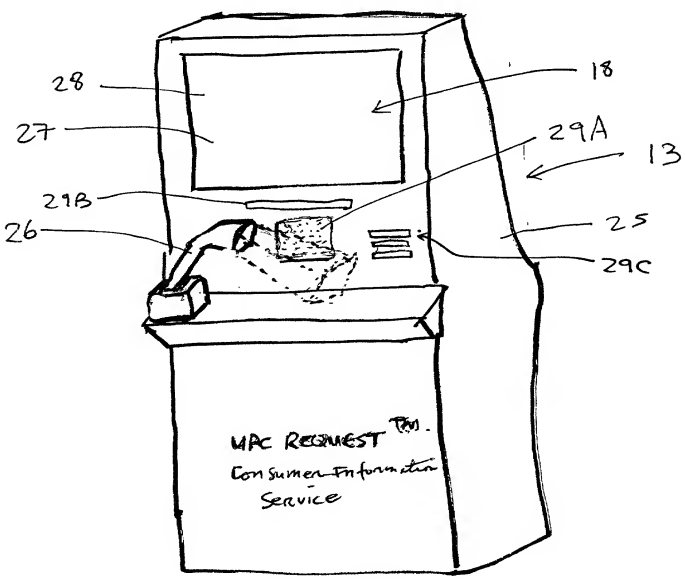


FIG. 3A2

10040176.102501

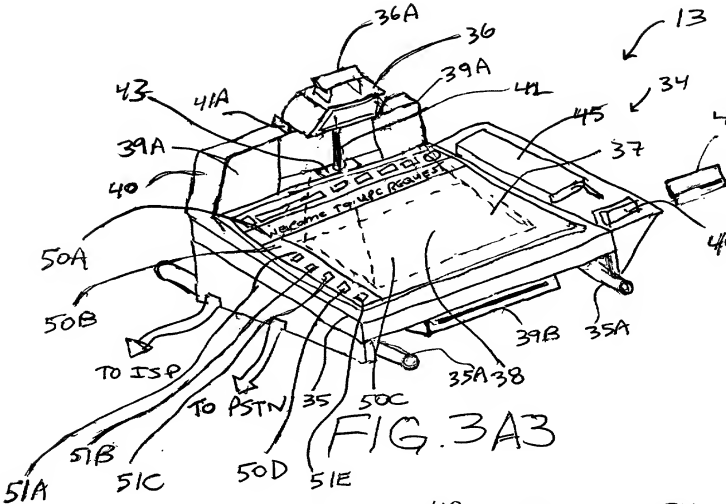


FIG. 3A3

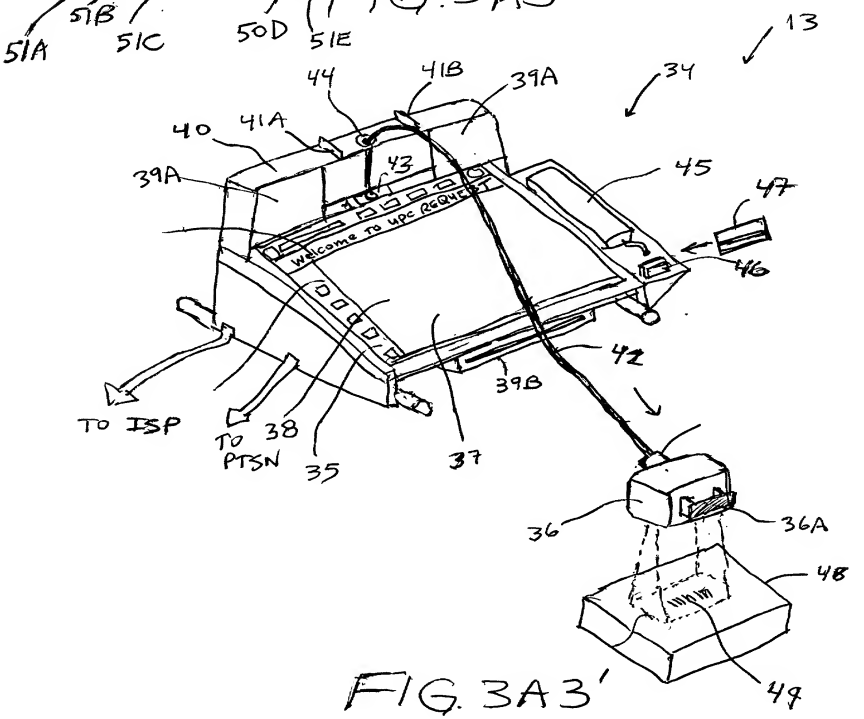


FIG. 3A3'

10040176.102501

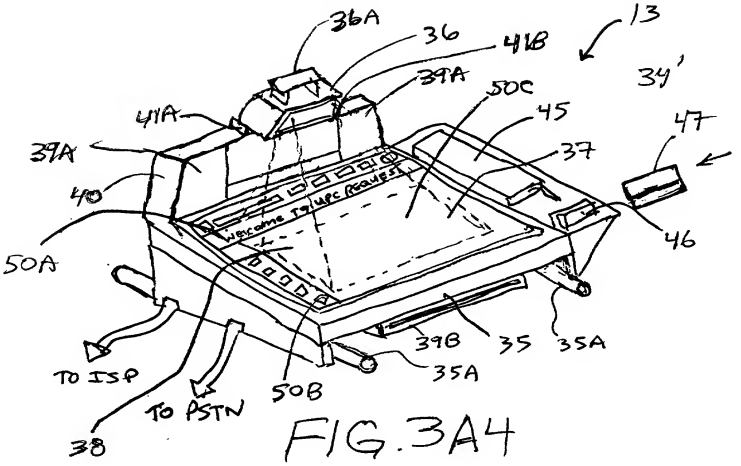
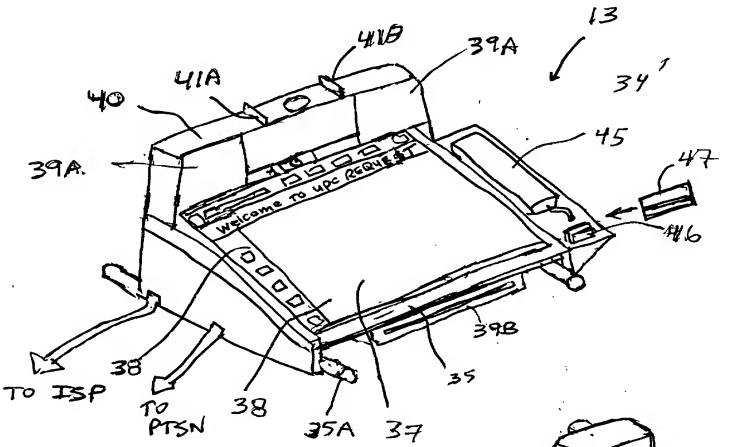


FIG. 3A4



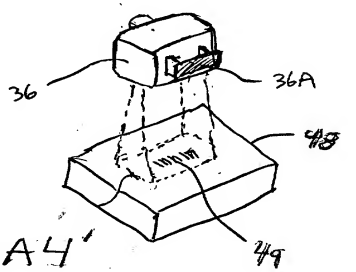


FIG. 3A4'

10040176.102501

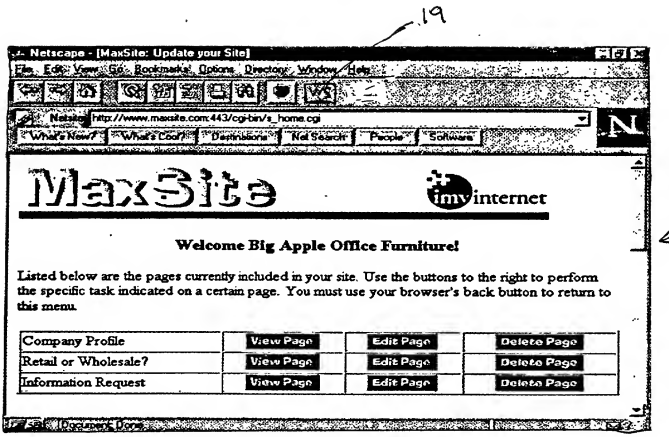


FIG. 3B

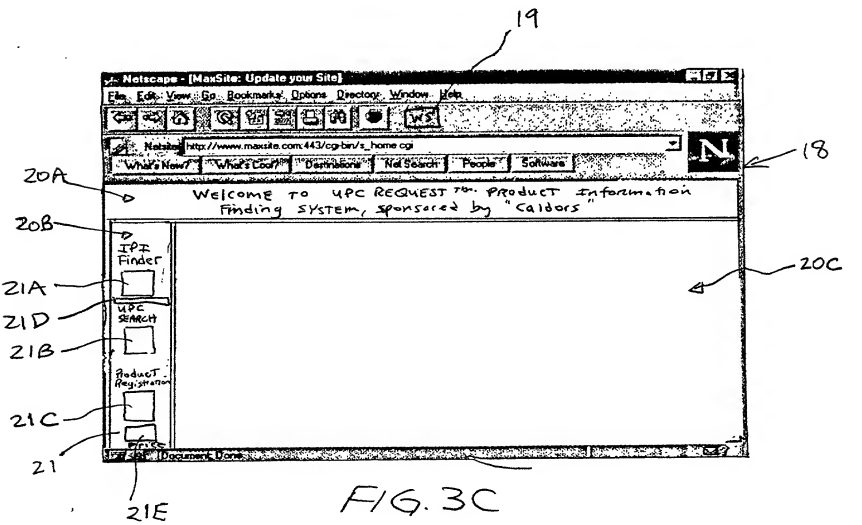


FIG. 3C

10040179.102501

IPSN	Registrant's Name	Product Description	Uniform Resource Locator (URL)	Trade/service marks	e-mail Address	status
7/18908/17674/0	Apple Computer, Inc Cupertino, Calif.	Power mac 7600/120 personal computer	http://www._____/	power mac.		
0/373/100/6	procter & Gamble	tooth paste	http://www._____/	crest		
3/12547/68404/0	warner welcome	acid reducer	http://www._____/	zantac, zantac 75		
0/00005/17643/4	Kodak, Inc.	film processing	http://www._____/	kodak		
⋮	⋮	⋮	⋮	⋮	⋮	⋮
0/27242/51057/9	Sony, Inc.	personal computer	http://www.sony.com./pc	sony		

Information structure of Relational Data base realized aboard IPS directory server

FIG. 4A1

8/19

TOS20T "9ZTOhOOT

"Subfield Structure of URL Information Field of IPSID Database"

URL_i	Product specification Information Field	Product update Information Field	Product Warranty/Servicing Information Field	Product Incentive Information Field	Product Review Information Field	Miscellaneous Information Field	Product Advertisement Information Field
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.

FIG. 4A2

IPSN	Registrant's Name	Product Description	Trade/service marks	e-mail Address	status
7/05089/37460/7	Netscape Communication Corp.	Internet Navigator	Netscape Navigator		
0/30000/0/020/4	Quaker Inc.	oatmeal	Quaker		
0/496/390/1	Coca cola, Inc	cola soda	Coca-Cola, Coke		
0/7599/24245/2	Warner Bros.	Pat Metheny Audio CD	Geffen		

Information structure of Relational Data base Realized aboard IPS Directory Server

FIG. 4B

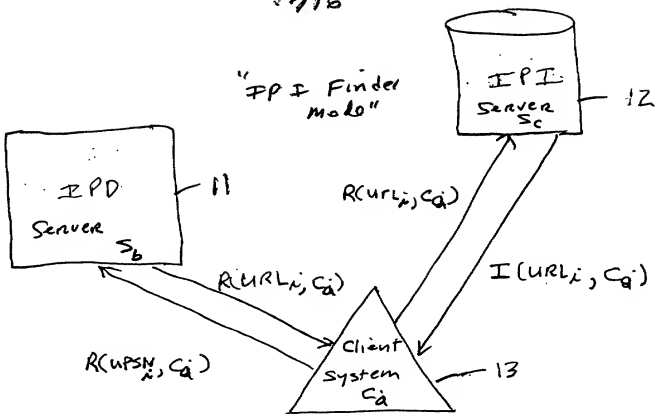


FIG. 5A

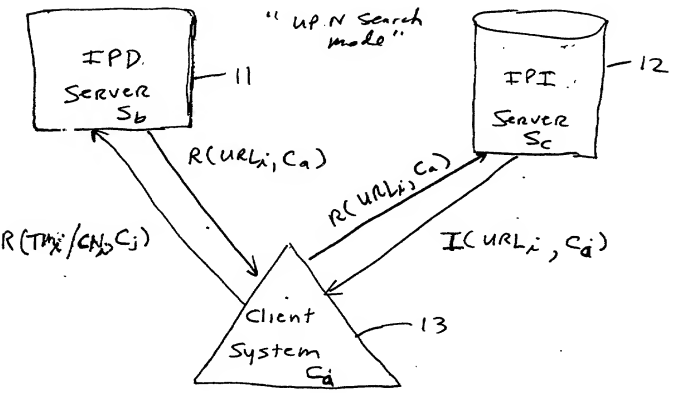
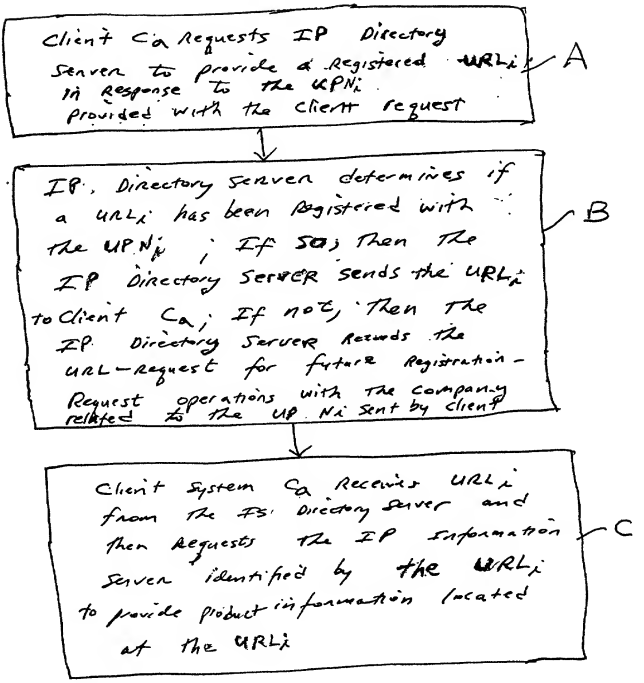


FIG. 5B

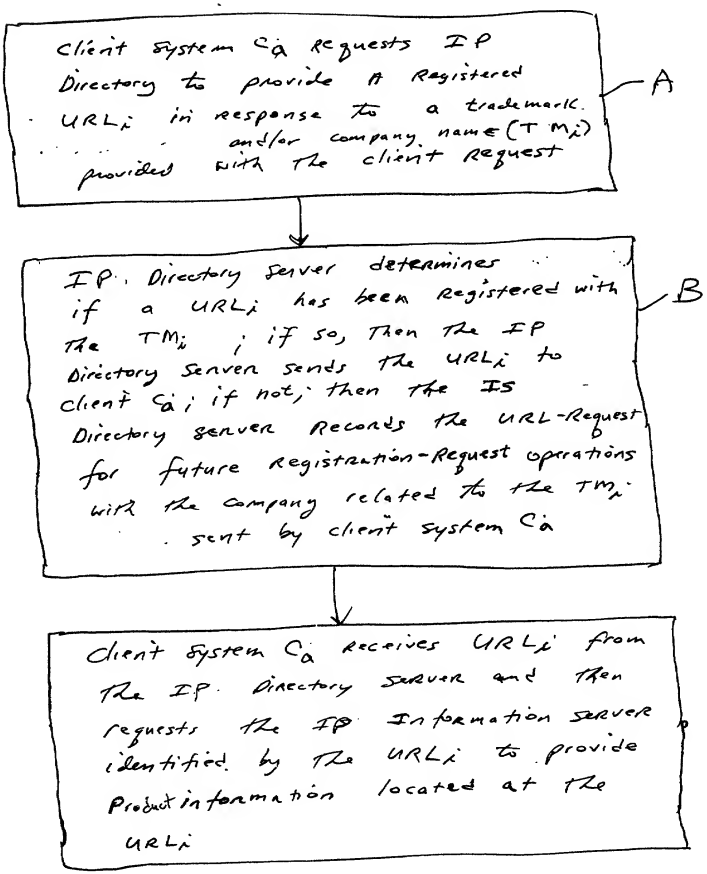
10040176.102501



"IP Finder Mode" (Fig. 5A)

FIG. 6A

1004015.1025501



"UP N Search Mode"

(Fig. 5B)

FIG. 6B

T05201-9/T0052

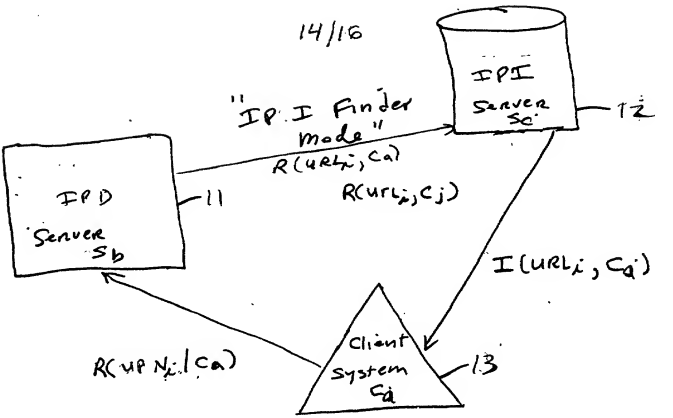


FIG. 7A

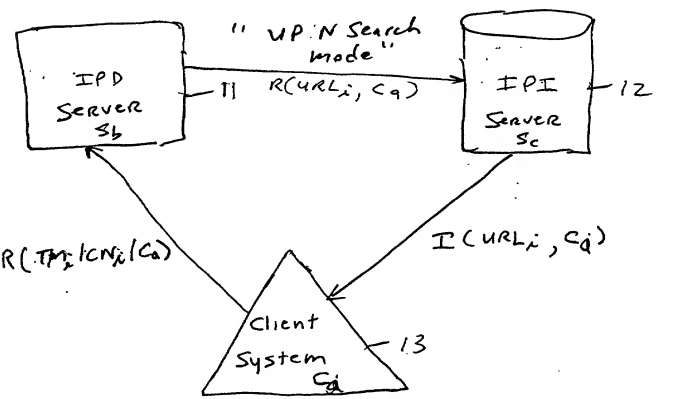
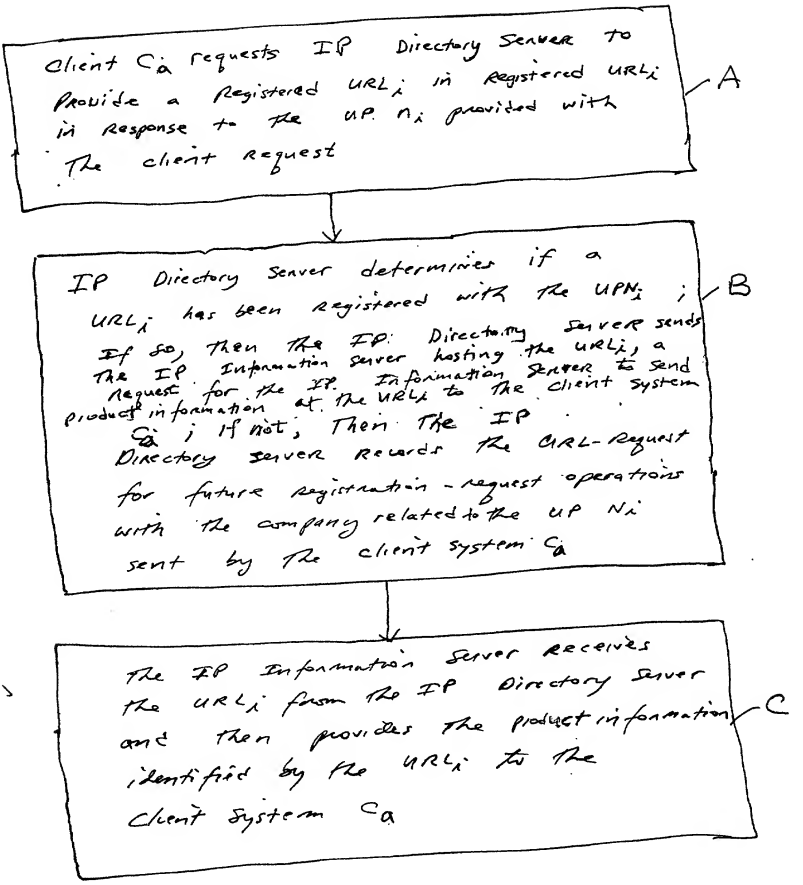


FIG. 7B

10040176.102501



"If I Finder Mode"

(Fig. ~~7A~~)

FIG. 8A

10040176.110501

Client C_a requests IP Directory Server to provide a registered URL_i in response to a trademark, servicemark and/or company (TM_i). provided with the client request

A

IP Directory Server determines if a URL_i has been registered with the TM_i; if so, then the IP Directory Server sends the IP Information Server hosting the URL_i, a request for the IP Information Server to send product information at the URL_i to the client system C_a; if not, then the IP Directory Server records the URL-Request for future registration-request operations with the company related to the UPN_i", sent by the client system C_a.

B

The IP Information Server hosting the URL_i receives the request from the IP Directory Server and then provides the product information identified by the URL_i to the client system C_a

C

"UPIN Search Mode"
(Fig. 7B)

FIG. 8B

T05201.5/1040001